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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/853,668

05/14/2001

Sung Jin Park

P-216

6826

34610 7590 10/28/2008

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EXAMINER

KUMAR, SRILAKSHMI K

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

10/28/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/853,668	Applicant(s) PARK, SUNG JIN	
	Examiner SRILAKSHMI K. KUMAR	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52, 56, 59-63, 65 and 67-72 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-52, 56, 59-63, 65 and 67-72 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following office action is in response to the amendment filed on July 29, 2008. Claims 1-52, 56, 59-63, 65, 67-72 are pending. Claims 1, 2, 4-6, 13, 14, 19, 23, 24, 30-33, 38, 42, 43, 49, 51, 52, 55, 56, 59-63, 65, 67 and 68 have been amended. Claims 69-72 are newly added. Claims 53, 54, 57, 58, 64 and 66 have been cancelled.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims **1, 5-20, 24-29, 31-39, 43-48, 50-52, 55, 56, 59-62 and 69-72** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hetzler (US 5,954,820) in view of Springer (US 5,936,608) and further in view of Zenda (US 5,386,577).

As to **claims 1 and 13**, Hetzler discloses a method for adjusting a brightness of a display screen of a system, the method comprising; determining whether there is a user signal input into the system (e.g., determining whether keystrokes is inputted or not); switching the system into an idle mode if there are no user signal inputs (backlight 13 is turned off when a user is not viewing the display); determining whether at least one of certain display related processes is running when in the idle mode; and adjusting the brightness of the display screen when in the idle mode based on processor usage (see column 3, lines 2-9 and column 5, lines 13-50 and column 8, lines 8-13).

Hetzler does not teach determining whether a processor is being powered by an internal power source and switching the system into a power conservation mode if the processor is being powered by an internal power source. Hetzler also does not teach where the brightness is adjusted without turning the display screen off.

AAPA teaches in the specification on pages 3-4, paragraphs 3-4 where the CPU determines whether the power supplied to the system is supplied through an external power source such as an AC adapter or an internal power source, such as a battery. AAPA further teaches in paragraph 4, where the system is switched into a power conservation mode and reduces the luminance or brightness of the display without turning the display off. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of determining whether a processor is being powered by an internal power source; and switching the system into a power conservation mode if the processor is being powered by an internal power source, specifically, where the luminance is lowered when powered by a battery in order conserve power without turning the display off as taught by AAPA into the prior art of Hetzler in order to increase the life of the internal power source .

Hetzler does not teach maintaining the brightness of the display screen and periodically checking whether at least one of the certain display related processes is running, if at least one of the certain display related processes is running; checking processor usage if at least one of the certain display related processes is not running and where the brightness is adjusted without turning the display screen off.

Springer teaches in col. 4, lines 10-28 and col. 3, lines 15-25, where the display control system has operating rules module which identities one or more predetermined conditions of

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operating system events or messages which require a variation in the brightness of visual object displayed on the display. The operating system events are monitored and filtered for the predetermined conditions by an activity monitoring module. The manager module directs the variation of brightness based on the activity monitoring. It would have been obvious to one of ordinary skill at the time the invention was made to include the feature of maintaining the brightness of the display screen and periodically checking whether at least one of the certain display related processes is running, if at least one of the certain display related processes is running; checking processor usage if at least one of the certain display related processes is not running and where the brightness is adjusted without turning the display screen off as taught by Springer into the display system of Hetzler as by reducing brightness, power consumption is reduced (Springer, col. 3, lines 41-48) and prevents the user from having to provide an input to power on the display.

As to **claim 14**, Hetzler discloses a computer readable medium having stored thereon a sequence of computer executable instructions which, when executed by a processor, cause the processor to perform the steps of monitoring a system to determine whether for a certain display related processes are running (e.g., determining whether keystrokes is inputted or not); see column 8, lines 8-13. Hetzler teaches a step of maintaining the brightness of the display if the certain display related processes are running (backlight is turned on when a user is viewing the display) and reducing the brightness of a display if the certain display related processes are not running (backlight 13 is turned off when a user is not viewing the display); see column 3, lines 2-9 and column 5, lines 13-50 and column 8, lines 8-13. Hetzler does not teach where the brightness is reduced without turning off the display and periodically checking whether at least

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one of a certain display related processes is running if at least one of the certain display related processes is running. Springer teaches in col. 3, lines 15-25 and col. 4, lines 10-28 where the brightness is reduced without turning the display screen off and periodically checking whether at least one of a certain display related processes is running if at least one of the certain display related processes is running. Specifically, Springer teaches where the display control system has an operating rules module that identifies operating events and reduces brightness without turning off the display screen. It would have been obvious to one of ordinary skill in the art to include the feature of reducing brightness without turning off the display screen as taught by Springer into the display system of Hetzler as by reducing brightness, power consumption is reduced (Springer, col. 3, lines 41-48) and prevents the user from having to provide an input to power on the display.

As to **claim 31**, this claim differs from claims 1 and 13 above only in that claim 31 is apparatus whereas claims 1 and 13 are method. Thus, apparatus claim 31 is analyzed as previously discussed with respect to method claims 1 and 13 above.

As to **claim 32**, this claim differs from claim 14 and 33 above only in that claim 32 is apparatus whereas claims 14 and 33 are method. Thus, apparatus claim 32 is analyzed as previously discussed with respect to method claims 14 and 33 above.

As to **claim 33**, this claim differs from claim 14 only in that claim 33 deletes the limitation computer-readable medium recited in preamble of claim 14. Thus, claim 33 is analyzed as previously discussed with respect to claim 14 above since claim 33 is broader than claim 14.

As to **claim 5**, Hetzler teaches wherein determining processor usage comprises measuring a processor usage amount (current access frequency, column 3, lines 2-38), and reducing the brightness of the display screen if the processor usage amount is below a threshold value (column 3, lines 2-38, Hetzler teaches where the current access frequency is compared to a previously calculated and continuously updated threshold frequency, where depending on the threshold different power saving modes are initiated).

As to **claim 6**, Hetzler teaches wherein determining the processor usage comprises determining whether the display screen is displaying a movie (column 6, lines 17-64, whether a DVD is running).

As to **claim 7**, Hetzler teaches wherein determining whether the display screen is displaying a movie comprises determining whether a memory device connected to the processor is operating (column 6, lines 17-64, if a DVD is running).

As to **claim 8**, Hetzler teaches wherein the memory device comprises a hard disk (column 6, lines 17-64).

As to **claim 9**, Hetzler teaches wherein the memory device comprises a CD-ROM (column 6, lines 17-64).

As to **claim 10**, Hetzler teaches wherein the memory device comprises a DVD (column 6, lines 17-64).

As to **claim 11**, Hetzler teaches wherein the brightness of the display screen is reduced if the display screen is not displaying a movie (column 8, lines 30-64, specifically lines 55-65 for movies).

As to **claim 12**, wherein the brightness of the display screen is maintained if the display screen is displaying a movie (column 8, lines 30-64, specifically lines 55-65 for movies).

As to **claims 15 and 34**, Hetzler clearly teaches system being a computer (portable computer 41).

As to **claims 16, 35 and 50**, Hetzler teaches wherein the display is a liquid crystal display screen (11).

As to **claims 17 and 36**, Hetzler clearly teaches monitoring for user input signal (i.e. keyboard activity); see column 3, lines 2-9.

As to **claims 18 and 37**, note the discussion of Hetzler above, Hetzler as modified by Springer do not mention the step of determining whether the system is powered by an internal power source. AAPA teaches in the specification on pages 3-4, paragraphs 3-4 where the CPU determines whether the power supplied to the system is supplied through an external power source such as an AC adapter or an internal power source, such as a battery. AAPA further teaches in paragraph 4, where the system is switched into a power conservation mode and reduces the luminance or brightness of the display without turning the display off. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of determining whether a processor is being powered by an internal power source; and switching the system into a power conservation mode if the processor is being powered by an internal power source, specifically, where the luminance is lowered when powered by a battery in order conserve power without turning the display off as taught by AAPA into the prior art of Hetzler in order to increase the life of the internal power source .

As to **claim 19**, Hetzler teaches wherein the monitoring step comprises determining processor usage amount, and comparing said processor usage amount against a reference amount (column 3, lines 2-38).

As to **claim 20**, Hetzler teaches wherein the reference amount is controllably variable (column 3, lines 12-18, where the threshold frequency is variable).

As to **claims 24 and 43**, Hetzler teaches the monitoring step including determining whether a video process related device is in use; see column 6, lines 17-64.

As to **claims 25-26, 28 and 44-45, 47, 69 and 71** Hetzler teaches the use DVD; see column 6, lines 17-18. It is known in the art that DVD could be either, a readable and writeable memory or a read only memory.

As to **claims 27, 46, 55, 59, 61, 70 and 72**, Hetzler clearly teaches a CD-ROM; see column 6, lines 17-18.

As to **claim 29**, Hetzler teaches wherein the video process related device comprises a modem (17, column 4, lines 50-55).

As to **claim 38**, Hetzler teaches wherein monitoring the system for display related processes comprises determining a processor usage amount, and comparing said processor usage amount against a reference amount (column 3, lines 2-38).

As to **claim 39**, Hetzler teaches wherein the reference amount is controllably variable (column 3, lines 12-18, where the threshold frequency is variable).

As to **claim 48**, Hetzler teaches wherein the video process related device comprises a modem (17, column 4, lines 50-55).

As to **claims 51, 55, and 59**, Hetzler teaches wherein the display related processes include at least one of playing a CD-ROM; a DVD, a MPEG file, video file or downloading a video file from the internet or downloading an internet broadcast (column 6, lines 17-64).

As to **claims 52, 56, 60 and 62**, Hetzler teaches wherein the display related processes do not include user inputs via a mouse or keyboard (column 8, lines 8-13).

As to claims 63-68,

3. **Claims 2, 3, 21, 22, 40 and 41** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hetzler in view of Springer and AAPA as applied to **Claims 1, 5-20, 24-29, 31-39, 43-48, 50-52, 55, 56, 59-62 and 69-72**, above and further, in view of McFedries (Windows ® 98 Unleashed, May 12, 1998).

As to **claims 2, 21 and 40**, Hetzler teaches determining processor usage amount (column 3, lines 2-38). Hetzler as modified by Springer do not teach where the determining information is contained in a registry. McFedries teaches operating system Windows® 98. On page 14, McFedries teaches HKEY_DYN_DATA key, and where the registry files are updated when you shut down the operating system, restart the operating system and at regular intervals when running the operating system. The determining information for the processor usage is contained in this registry as shown by McFedries on page 14. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the processor usage amount determining information is contained in a registry as taught by McFedries into that of Hetzler as modified by Springer, as Hetzler is a computer system which uses an operating system, such as Windows® 98.

As to **claims 3, 22 and 41**, McFedries teaches wherein the registry comprises
HKEY_DYN_DATA\PerfStats\StatData (Page 14 Fig. 12.10).

4. **Claims 4, 23, 30, 42, 49, 63, 65, 67 and 68** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hetzler in view of Springer as applied to **claims 1, 5-20, 24-29, 31-39, 43-48, 50-52, 55, 56, 59-62 and 69-72**, above, and further in view of Kardach (US 6,018,803).

As to **claims 4, 23 and 42**, Hetzler as modified by Springer do not teach wherein the monitoring step comprises determining whether a video process related keyword is contained in the currently operating process.

Kardach teach a computer processing system where the processor comprises a bus utilization activity circuit, wherein the bus utilization activity circuit determines whether a video process related keyword is contained in the currently operating process (column 7, lines 1-19, where the bus utilization activity circuit determines whether an MPEG is playing) and determining whether a video process related device is in use (col.7, lines 1-19 where it is determined whether an MPEG is playing). It would have been obvious to one of ordinary skill in the art to include the bus utilization activity circuit as taught by Kardach into the computer system of Hetzler as modified by Springer as once the bus utilization activity circuit detects a keyword determining a movie is currently operating, it prevents the screensaver from activating.

As to **claims 30 and 49**, Hetzler teaches wherein the monitoring step comprises; determining processor usage amount and comparing said processor usage amount against a reference amount (column 3, lines 12-18, where the threshold frequency is variable). Hetzler as modified by Springer does not teach wherein the monitoring step comprises determining whether a video process related keyword is contained in the currently operating process.

Kardach teach a computer processing system where the processor comprises a bus utilization activity circuit, wherein the bus utilization activity circuit determines whether a video process related keyword is contained in the currently operating process (column 7, lines 1-19, where the bus utilization activity circuit determines whether an MPEG is playing) and determining whether a video process related device is in use (col.7, lines 1-19 where it is determined whether an MPEG is playing). It would have been obvious to one of ordinary skill in the art to include the bus utilization activity circuit as taught by Kardach into the computer system of Hetzler as modified by Springer as once the bus utilization activity circuit detects a keyword determining a movie is currently operating, it prevents the screensaver from activating.

As to **claims 63, 65, 67 and 68**, Hetzler as modified by Springer fail to teach wherein the display related processes are indicative of a user watching a video or program on the display screen. Kardach teaches a computer processing system where the processor comprises a bus utilization activity circuit, wherein the bus utilization activity circuit determines whether a video process is running (col. 7, lines 1-19 where the bus utilization activity circuit determines whether an MPEG is playing). It would have been obvious to one of ordinary skill in the art to include the bus utilization activity circuit as taught by Kardach into the computer system of Hetzler as modified by Springer as once the bus utilization activity circuit detects a movie is currently operating, it prevents the screensaver from activating.

Response to Arguments

5. Applicant's arguments filed July 29, 2008 have been fully considered but they are not persuasive.

Applicant argues where the prior art of Hetzler does not teach determining the power source is an internal power source, and switching into a power conservation mode based on the processor being powered by an internal power source. Examiner, respectfully, agrees. As shown by the rejection above, in the applicant's specification, in the background art section, applicant's admitted prior art teaches the feature of the processor determining the power source to be an internal power source such as a batter and switching to a power save mode based on the processor being powered by the batter. It would have been obvious to one of ordinary skill in the art to include the feature as taught by AAPA into Hetzler in order to extend the life of the battery for use with the display.

Applicant argues where the prior art of Hetzler does not teach maintaining the brightness of the display screen and periodically checking whether at least one of the certain display related processes is running, if at least one of the certain display related processes is running; checking processor usage if at least one of the certain display related processes is not running and where the brightness is adjusted without turning the display screen off. Applicant also argues where Springer fails to overcome the deficiencies of Hetzler. Examiner, respectfully, disagrees.

Springer teaches in col. 4, lines 10-28 and col. 3, lines 15-25, where the display control system has operating rules module which identities one or more predetermined conditions of operating system events or messages which require a variation in the brightness of visual objectd displayed on the display. the operating system events are monitored and filtered for the predetermined conditions by an activity monitoring module. The manager module directs the variation of brightness based on the activity monitoring. It would have been obvious to one of ordinary skill at the time the invention was made to include the feature of maintaining the

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brightness of the display screen and periodically checking whether at least one of the certain display related processes is running, if at least one of the certain display related processes is running; checking processor usage if at least one of the certain display related processes is not running and where the brightness is adjusted without turning the display screen off as taught by Springer into the display system of Hetzler as by reducing brightness, power consumption is reduced (Springer, col. 3, lines 41-48) and prevents the user from having to provide an input to power on the display.

With respect to applicant's arguments for claims 13, 14, 31, 32 and 33, applicant argues where the prior art of Hetzler and Springer do not teach the limitations similar to claim 1, above. Examiner, respectfully, disagrees. As shown in the above rejection and response to arguments, Springer teaches the features of periodically checking whether at least one of a certain display related processes is running in col. 3, lines 15-25 and col. 4, lines 10-28.

With respect to claim 18 and 37, see the new grounds of rejection, above.

With respect to the remaining claims of 2-12, 15, 16, 17, 19-30, 34-36, 38-52, 55, 56, 59-63, 65, 67-72, these claims are taught by the prior art of Hetzler, Springer, AAPA and Kardian, in the above rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SRILAKSHMI K. KUMAR whose telephone number is (571)272-7769. The examiner can normally be reached on 7:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sue Lefkowitz can be reached on 571 272 3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Srilakshmi K Kumar/
Examiner
Art Unit 2629

SKK
October 24, 2008